



Question
<ul style="list-style-type: none"> <li>Cardiovascular</li> </ul>
<p><b>1. A 68-year-old lady presents with dyspnea on walking. She is taking furosemide and aspirin for her ischemic heart failure treatment. She has a blood pressure of 165/90. Which of the following is the most appropriate medication to add?</b></p> <ol style="list-style-type: none"> <li>Atenelol</li> <li>Enalapril ***</li> <li>Increase furosemide dose</li> <li>Isosorbide mononitrate</li> <li>Spironolactone</li> </ol>
<p><b>2. A 40-year-old African patient attended your clinic for follow-up. His blood pressure is 150/90 mm Hg despite lifestyle changes for more than two months. Examination was unremarkable. His investigations were within normal. Which is the drug of choice for this patient?</b></p> <ol style="list-style-type: none"> <li>ACEI</li> <li>Alpha blockers</li> <li>ARBs</li> <li>Beta blockers</li> <li>Calcium channel blockers *</li> </ol>
<p><b>3. A 72-year-old female, is not controlled on a once-daily combination pill containing atenolol 50 mg and hydrochlorothiazide 25 mg. Her blood pressure is 170/110. You had added 5 mg of lisinopril, and her creatinine rises from 1.1 to 1.9. What do you suspect?</b></p> <ol style="list-style-type: none"> <li>Atherosclerotic renal artery stenosis***</li> <li>Hyperaldosteronism</li> <li>Hypertensive nephrosclerosis</li> <li>Nonadherence</li> <li>Pheochromocytoma</li> </ol>
<p><b>4. A 35-year-old male consults you about vague chest pain he developed while sitting at his desk earlier in the day. The pain is right-sided and was sharp for a brief time when it began, but it rapidly subsided. There was no hemoptysis and the pain does not seem</b></p>

pleuritic. His physical examination, EKG, and oxygen saturation are unremarkable. A chest film shows a **mild right pneumothorax (< 10%)**. Which one of the following should you do next?

- a. Admit the patient to the hospital for observation
- b. Admit the patient to the hospital for chest tube placement
- c. Obtain a repeat chest radiograph in 24-48 hours \*
- d. Obtain an expiratory chest radiograph
- e. Order D-dimer test

5. A **78-year-old male** attends your clinic for a well-care visit. He has 2 sons, but they are married and he lives alone. He has **ischemic heart** disease on long acting **nitrate and aspirin**. When you ask him about his adherence to treatment, he says that he is becoming **forgetful**. He can perform the basic activities of daily living, such as bathing and eating, but he is **facing difficulties in managing money and using the telephone**. What is the most appropriate action?

- a. Arrange an interview with the care givers \*
- b. Reassurance
- c. Referral to the hospital
- d. Referral to psychiatrist
- e. Referral to a geriatric home

6. You are seeing a **43-year old** hypertensive patient well controlled with **hydrochlorothiazide**. His BP is 120/80 mmHg. His laboratory evaluation reveals a normal creatinine and a GFR greater than 90mL/min and **micro albuminuria**. Which of the following interventions is indicated in this patient?

- a. Change to angiotensin-converting enzyme (ACE) inhibitor \*
- b. Check glycosylated hemoglobin level (HbA1c)
- c. Commend him on his excellent
- d. Increase his hydrochlorothiazide dose
- e. Repeat serum creatinine

7. You are evaluating a **71-year-old male** patient with **shortness of breath mainly with exertion**. He also complains of fatigue and orthopnea. On examination, you noticed **congested neck veins, fine basal crackles with decreased breath sounds**. Which of the following would be the most appropriate treatment?

- a. Bronchodilators
- b. Antibiotics
- c. Steroids
- d. Anticoagulants
- e. Diuretics \*

8. A **60-year-old man** had an **anterior myocardial infarction 3 months** ago. He currently is

<p><b>asymptomatic</b> and has normal vital signs and a normal physical examination. He is on an antiplatelet agent and an ACE inhibitor. What other category of medication would typically be prescribed for <b>secondary prevention of myocardial infarction</b>?</p> <ul style="list-style-type: none"> <li>a. Alpha-blocker</li> <li>b. Beta-blocker *</li> <li>c. Calcium-channel blocker</li> <li>d. Nitrates</li> <li>e. Naproxen sodium</li> </ul>
<p><b>9. You are seeing a 49-year old man with a known history of hypercholesterolemia and hypertension who has had recent complain of chest pain. It is not associated with activity but will occur intermittently throughout the day. Which of the following is the best to describe his case?</b></p> <ul style="list-style-type: none"> <li>a. Atypical angina *</li> <li>b. Cardiac neurosis</li> <li>c. Classic angina</li> <li>d. GERD</li> <li>e. Non-angina pain</li> </ul>
<p><b>10. An anxious young woman who is taking birth control pills presents to the emergency room with shortness of breath. The absence of which of the following would make the diagnosis of pulmonary embolus unlikely?</b></p> <ul style="list-style-type: none"> <li>a. Wheezing</li> <li>b. Pleuritic chest pain *</li> <li>c. Tachypnea</li> <li>d. Hemoptysis</li> <li>e. Right-sided S3 heart sound</li> </ul>
<p><b>11. A 60-year-old male patient on aspirin, nitrates, and a beta blocker, being followed for chronic stable angina, presents to the ER with a history of two to three episodes of more severe and long-lasting anginal chest pain each day over the past 3 days. His ECG and cardiac enzymes are normal. The best course of action of the following is to</b></p> <ul style="list-style-type: none"> <li>a. Admit the patient and begin intravenous digoxin</li> <li>b. Admit the patient and begin intravenous heparin *</li> <li>c. Admit the patient and give prophylactic thrombolytic therapy</li> <li>d. Admit the patient for observation with no change in medication</li> <li>e. Discharge the patient from the ER with increases in nitrates and beta blockers</li> </ul>

<ul style="list-style-type: none"> <li>• <b>Respiratory</b></li> </ul>
<p><b>12. A 60-year male, is an established COPD patient, who is used to smoke 2 pack of cigarette per day for 14 years. He is on treatment and his breathing is improved. He presents three months later and has noticed blood in his sputum. Examination of his oral cavity and chest are normal. What is the most appropriate management?</b></p> <ol style="list-style-type: none"> <li>Cease medications as hemoptysis is side effect</li> <li>Give antibiotic</li> <li>Increase dose of medication</li> <li>Observe for one month to see if his symptoms resolve</li> <li>Urgent referral to chest imaging and assessment *</li> </ol>
<p><b>13. A 6-week-old child develops increased respiratory rate and a non-productive cough. Physical examination is significant for rales and rhonchi. The past medical history for the child is positive for an eye discharge at 3 weeks of age, which was treated with a topical antibiotic drug. The most likely organism causing this child's condition is</b></p> <ol style="list-style-type: none"> <li>Neisseria gonorrhoeae</li> <li>Staphylococcus aureus</li> <li>Group B streptococcus</li> <li>Chlamydia trachomatis *</li> <li>Herpesvirus</li> </ol>
<p><b>14. A 45-year-old teacher presents with a 3-month history of hoarseness that is not improving. The most appropriate management at this time would be</b></p> <ol style="list-style-type: none"> <li>Azithromycin</li> <li>Laryngoscopy *</li> <li>Trial of inhaled corticosteroids</li> <li>Trial of a proton pump inhibitor</li> <li>Voice therapy</li> </ol>
<p><b>15. You have just diagnosed mild persistent asthma in a 13-year-old female. Along with patient education, your initial medical management should be</b></p> <ol style="list-style-type: none"> <li>Short-acting inhaled <math>\beta</math>-agonist to be used only as needed</li> <li>Long-acting inhaled <math>\beta</math>-agonist daily</li> <li>Low-dose inhaled corticosteroid daily, along with a short-acting inhaled <math>\beta</math>-agonist as needed *</li> <li>Low-dose inhaled corticosteroid daily, along with a long-acting inhaled <math>\beta</math>-agonist daily</li> <li>Montelukast (Singulair) daily</li> </ol>
<p><b>16. A 55-year-old male has a 3-month history of chronic shortness of breath and dyspnea on exertion. His physical examination is unremarkable except for 1+ ankle edema bilaterally and a soft systolic</b></p>

**murmur**. A stress echocardiogram is normal. Pulmonary function tests are normal except for a **low diffusing capacity** of the lung for carbon monoxide (DLCO). Which one of the following conditions should be considered in this patient?

- a. Asthma
- b. Chronic pulmonary thromboembolism
- c. Emphysema
- d. Hypersensitivity pneumonitis
- e. Interstitial lung disease \*

17. While making rounds on the rehabilitation floor of your hospital, you see a **62-year-old** female who was recently transferred from the acute-care section of the hospital where she was admitted for **uro-sepsis**. She is a **liver-transplant recipient** and her specialist has been **tapering her immunosuppressive** drug regimen for the last 2 months. According to the nursing staff the patient became **hypoxic** suddenly and had a **low-grade fever** and **cough**. You note that she looks ill and uncomfortable and has an **increased respiratory rate**. A chest radiograph reveals **diffuse bilateral interstitial infiltrates**. Which one of the following is the most likely diagnosis?

- a. Pneumococcal pneumonia
- b. Pneumocystis pneumonia \*
- c. Pneumothorax
- d. Pulmonary tuberculosis
- e. Staphylococcal pneumonia

18. A **62-year-old** female presents to your office with **diarrhea** and signs and symptoms of **dehydration**. She has a temperature of **38.6°C** and a WBC count of **17,000/mm<sup>3</sup>** (N 5,300-10,800). You admit her to the hospital, and a **Clostridium difficile toxin** assay is positive. Because of the severity of her infection, you initiate **oral vancomycin**, 125 mg 4 times daily. She has a poor clinical response and you decide to alter the antibiotic regimen to include intravenous coverage. Which one of the following intravenous antibiotics would be most appropriate?

- a. Ciprofloxacin
- b. Imipenem/cilastatin
- c. Meropenem
- d. Metronidazole \*
- e. Vancomycin

• **Neurology**

19. A **63-year-old** man presents with a **three-month history of tremors** affecting his arms. His two brothers also had tremors. On examination, he had resting tremors of his hands, with **rigidity of that arms** and he had a mild generalized **bradykinesia**.

**What is the most likely diagnosis?**

- a. Benign essential tremors
- b. Drug-induced Parkinsonism
- c. Idiopathic Parkinson's disease \*
- d. Huntington's chorea
- e. Wilson's disease

**20. A 30-year-old man presents with a 12-month history of headaches. He describes it as severe and sudden onset around his right supraorbital and temporal region associated with watery eyes and a blocked nose. The attacks last about 1-2 hours, occurring daily for a week. He experiences this phenomenon every 3-4 months. In between the attacks he is asymptomatic. The history of this patient suggests the diagnosis of:**

- a. Chronic glaucoma
- b. Cluster headache \*
- c. Migraine
- d. Tension headache
- e. Trigeminal neuralgia

**21. A 22 years old woman complains of s severe unilateral throbbing headache accompanied by emesis and photophobia. She has a history of "bad headaches" and states that her mother and sister also had "headache problems". The patient takes no medications, is afebrile, and other than being moderately uncomfortable, has a normal physical examination. The most likely diagnosis is:**

- a. Tension headache
- b. Sinusitis
- c. Meningitis
- d. Migraine headache \*
- e. Referred headache

**22. On corneal light reflex testing of 4-year-old child, the light reflex in the patient's right eye is in the center of the pupil. In the left eye it is located below the pupil, over the inferior-lateral portion of the iris. This clinical finding is associated with a congenital palsy of which one of the following cranial nerves?**

- a. Third
- b. Fourth \*
- c. Fifth
- d. Sixth
- e. Seventh

**23. A patient has a left facial droop. His nasolabial fold is flattened. When asked to smile, the left corner of his mouth droops. He is unable to keep his cheeks puffed out. Eye closure is only slightly weaker compared to the right and his forehead wrinkles when he is asked to look up high. What is the diagnosis?**

- a. Bell's palsy
- b. Cerebellar pontine angle tumor
- c. Left internal capsule stroke
- d. Parotid gland tumor
- e. Right middle cerebral artery occlusion \*

**24. A 39-year-old alcoholic man, who works as a painter, presents with burning pain in both feet, which has deteriorated over the last six months. On examination he is pale and has impairment of all modalities of sensations in both feet as well as absence of both ankle jerks. What is the most likely diagnosis?**

- a. Alcoholic peripheral neuropathy \*
- b. Chronic inflammatory demyelinating polyradiculopathy
- c. Hereditary sensory neuropathy.
- d. Lead neuropathy
- e. Vitamin B12 deficiency

**25. A 45-year-old diabetic male, has normal tone, 5/5 power, normal plantars and proprioception. However, you notice that the patient does not respond to any sensory stimulus on the medial side of the right lower leg. Which dermatome is affected?**

- a. L1
- b. L2
- c. L3
- d. L4 \*
- e. L5

**26. A 36-year-old woman presents to clinic with neurological symptoms. On examination, she is able to stand with her feet together. Upon closing her eyes, however, she is unable to keep her balance. What is the diagnosis?**

- a. Alcohol abuse
- b. Cerebellar problem
- c. Diabetes
- d. Proprioceptive problem \*
- e. Visual problem

**27. A 50-year-old woman has two-week history of acute and progressive difficulty in walking and weakness in her arms. There is proximal and distal limb weakness which is more marked, in the legs than the arms. All tendon reflexes including the plantar responses were flexor. There was no sensory loss. Blood pressure was 140/80 mmHg supine and 110/70 mmHg on standing. What is the most likely diagnosis?**

- a. Cervical cord compression
- b. Guillain-Barre syndrome \*
- c. Myasthenia gravis



<p>d. Polymyalgia rheumatica e. Polymyositis</p>
<p><b>28. A 25-year-old lady has developed weakness, double vision and tiredness especially at the end of the day. Examination reveals bilateral weakness of eye abduction, bilateral ptosis, slightly reduced proximal motor power in the limbs, normal reflexes and sensations. What is the diagnosis?</b></p> <p>a. Chronic progressive external ophthalmoplegia. b. Guillain-Barre syndrome. c. Multiple sclerosis. d. Myasthenia gravis. * e. Polymyositis</p>
<p><b>29. You test a patient's muscle strength and find that his maximum performance consists of the ability to move with gravity neutralized. This qualifies as which grade of muscle strength, on a scale of 0 to 5?</b></p> <p>a. 0 b. 1 c. 2 * d. 3 e. 4</p>
<p><b>30. A 66-year-old woman complains of stiffness and weakness on climbing stairs. She has a history of hypertension and diabetes. There is mild upper arm weakness, hip flexion is 4/5 bilaterally, with bilateral wasting and fasciculation in the quadriceps. Knee extension is 4/5. Dorsiflexion and plantar flexion are strong. There is brisk knee and ankle reflexes and positive Babinski's sign. Sensory examination and cranial nerves are normal. What is the most likely diagnosis?</b></p> <p>a. Diabetic neuropathy b. Motor neurone disease * c. Multiple sclerosis (MS) d. Myasthenia gravis e. Myositis</p>
<p><b>31. A 60-year-old male is referred with episodes of severe vertigo which may last up to 4 hours, associated with vomiting and sweating. On examination, during an attack, he is noted to have nystagmus together with mild right-sided deafness. Which one of the following is the most likely diagnosis?</b></p> <p>a. Acoustic neuroma b. Benign positional vertigo c. Labyrinthitis d. Meniere's disease * e. Vertebrobasilar ischaemic attacks</p>



32. A 20-year-old female presents with **seizures**. She had **flu-like** symptoms 3 days prior. One day before the seizure she was confused and had abnormal behavior. On examination the patient is **comatosed**, with a fever of **39°C**. She has a pulse of **100/min** and a blood pressure of **130/70 mmHg**. A CT head was normal. CSF examination shows no organisms, white cell count of **350/mm<sup>3</sup>**, mostly **lymphocytes**, protein concentration of **2.3 g/L** and glucose of **55 mg/dL**.

What is the most likely diagnosis?

- a. Disseminating sclerosis
- b. Epilepsy
- c. Herpes simplex encephalitis \*
- d. Meningococcal meningitis
- e. Tuberculous meningitis

33. A 19-year-old woman **collapsed**. She has **tonic-clonic seizure** lasting 2 minutes. When she was asked questions, she **mumbled** but no-one could understand what she was saying. When **pressure was applied to her nailbed, she opened her eyes** and reached out with her other hand to rub her nail and then pushed him away. What is her Glasgow Coma Scale?

- a. 12
- b. 11
- c. 10
- d. 9 \*
- e. 8

• Endocrine & Diabetes

34. In a patient with symptoms of **thyrotoxicosis** and **elevated free T4**, the presence of thyroid **TSH receptor site antibodies** would indicate which one of the following as the cause of thyroid gland enlargement?

- a. Graves' disease \*
- b. Hashimoto's (lymphadenoid) thyroiditis
- c. Subacute (giant cell) thyroiditis
- d. Toxic adenoma
- e. Toxic multinodular goiter

35. A 36-year-old female presents with a several-week history of **polyuria** and intense **thirst**. She currently takes no medications. On examination her blood pressure and pulse rate are normal, and she is clinically **euvolemic**. Laboratory tests, including serum electrolyte levels, renal function tests, and plasma glucose, are all normal. A urinalysis is significant only for **low specific gravity**. Her 24-hour urine output is **>5 L** with **low urine osmolality**. The most likely cause of this patient's condition is a deficiency of

- a. aldosterone

<ul style="list-style-type: none"> <li>b. angiotensin II</li> <li>c. arginine vasopressin *</li> <li>d. insulin</li> <li>e. renin</li> </ul>
<p><b>36. A 30-year-old woman is found to have a low serum thyroxine level after being evaluated for fatigue. Five years ago she was treated for Graves' disease with radioactive iodine. The diagnostic test of choice is</b></p> <ul style="list-style-type: none"> <li>a. Radioactive iodine uptake</li> <li>b. Serum T<sub>4</sub></li> <li>c. Serum T<sub>3</sub></li> <li>d. Serum TSH *</li> <li>e. TRH stimulation test</li> </ul>
<p><b>37. An 81-year-old male with type 2 diabetes mellitus has a hemoglobin A of 10.9%. He is on the maximum dosage of sulphonylurea. He has mild renal insufficiency and moderate ischemic cardiomyopathy. Which one of the following would be the most appropriate change in this patient's diabetes regimen?</b></p> <ul style="list-style-type: none"> <li>a. Add metformin</li> <li>b. Add sitagliptin</li> <li>c. Add pioglitazone</li> <li>d. Initiate insulin therapy *</li> <li>e. Shift to glibenclamide</li> </ul>
<p><b>38. 13-year-old girl presented to ER by abdominal pain and repeated vomiting. On examination, she is drowsy, dehydrated with funny smell of her breath. Abdominal examination revealed mild tenderness with audible intestinal sounds. What is your diagnosis?</b></p> <ul style="list-style-type: none"> <li>a. Diabetic ketoacidosis coma *</li> <li>b. Hepatic failure</li> <li>c. Intestinal obstruction</li> <li>d. Non ketotic hyperosmolar coma</li> <li>e. Renal failure</li> </ul>
<p><b>39. A 42 years old female presented with 5 months History of Nausea, vomiting &amp; malaise. Her laboratory investigation revealed hyponatremia with high creatinine level. What is your provisional diagnosis?</b></p> <ul style="list-style-type: none"> <li>a. Addison's disease. ***</li> <li>b. hypervolemia because of the vomiting</li> <li>c. hypothyroidism.</li> <li>d. Pheochromocytoma</li> <li>e. SIADH</li> </ul>
<p><b>40. A newly diagnosed 34-year-old female with type 2 diabetes. Her hemoglobin A1C was 7.2% at diagnosis. 3 months after using metformin 1000 mg twice daily, her blood pressure was 100/70 mm Hg, HbA1C 6% and microalbuminuria screen was positive. Which of</b></p>

**the following help to decrease end stage renal disease in this patient?**

- a. Initiate therapy with ACE \*
- b. Intensify diabetes management to more blood glucose control
- c. Limit dietary carbohydrate intake
- d. Limit dietary protein intake
- e. Refer to nephrology

**41. A 19-year-old student presents with a neck swelling. On examination the swelling moves up with swallowing and protrusion of the tongue. The swelling is?**

- a. Follicular carcinoma
- b. Lymphoma
- c. Papillary carcinoma
- d. Simple goiter
- e. Thyroglossal cyst \*

• **GIT & Hepatology**

**42. A 35-year-old female presents with 3 months of heartburn. She also complains of regurgitation, belching, and occasional dry cough. Her symptoms are worse when she lies down. She denies melena, weight loss, or dysphagia. What is the appropriate next step?**

- a. Obtain a barium swallow
- b. Obtain an ambulatory pH study of the esophagus.
- c. Obtain an esophageal manometry.
- d. Therapeutic trial with a proton pump inhibitor \*
- e. Perform an esophagogastroduodenoscopy

**43. A 30-year-old housewife presents with chronic persistent diarrhea for 6 weeks. Which of the following symptoms would MOST suggestive of a pathological cause of her diarrhea?**

- a. More than 3 episodes of diarrhea per day
- b. Having a sensation of active bowel movement
- c. Nocturnal diarrhea with 2-3 episodes after sleep\*\*\*
- d. Abdominal pain
- e. Similar episodes 2 years ago

**44. A male heavy smoker develops increasing difficulty in swallowing gradually over six months. Constriction of the mid-esophagus is seen on x-ray of barium swallow. The most likely diagnosis is:**

- a. achalasia
- b. hiatal hernia
- c. Mallory-Weiss syndrome
- d. pulsion diverticulum
- e. squamous cell carcinoma\*\*\*

**45. A 21-year-old student presents with a cramping diffuse abdominal pain associated with passage of mucus per rectum. Her pain improves on passing flatus. Investigations are normal. The most likely diagnosis is?**

- a. Anal fissure
- b. Carcinoma of sigmoid colon
- c. Chron's disease
- d. Irritable bowel syndrome \*
- e. Ulcerative colitis

**46. A 62-year-old man presents with rectal bleeding and a year's history of left iliac fossa pain and change in bowel habit. There is no weight loss. Most probably he has**

- a. Anal fissure
- b. Crohn's disease
- c. Diverticulosis \*
- d. Mallory-Weiss tear
- e. Ulcerative colitis

**47. A 60-year-old man complains of tiredness and significant weight loss. He notes episodes of rectal bleeding with blood mixed in with the stool over the last few weeks. There is no diarrhea. The most likely diagnosis is?**

- a. Anal fissure
- b. Colonic carcinoma \*
- c. Diverticulosis
- d. Haemorrhoids
- e. Ulcerative colitis

**48. A 42-year-old woman presents to your office complaining of abdominal pain. She describes upper abdominal pain that radiates to her scapula. For which of the following is this description classic?**

- a. Acute appendicitis
- b. Esophageal spasm
- c. Gallbladder disease \*
- d. Gastroesophageal reflux disease
- e. Pancreatitis

49. A 22-year-old male college **student** presents with 2 months of **worsening tenesmus** associated with frequent stools that are mixed with **blood and mucus**. He is afebrile and has no other signs of systemic illness. Initial blood and stool testing is normal apart from **mild anemia**. What is the most possible diagnosis?

- a. Cancer colon
- b. Diverticulosis
- c. Infectious diarrhea
- d. Inflammatory bowel disease \*
- e. Irritable bowel syndrome

50. A 66-year-old male sees you for follow-up after a recent hospitalization for his second episode of **diverticulitis** in the past 3 years. He is currently in excellent health and takes no daily medications except for occasional **acetaminophen for arthritis pain**. His physical examination is unremarkable except for a BMI of 19.0 kg/m<sup>2</sup>. He asks you about **preventing** further recurrences of his diverticulitis. You suggest that he do which one of the following?

- a. Lose weight
- b. Increase his dietary fiber intake \*
- c. Stop acetaminophen use
- d. Avoid eating nuts, corn, or popcorn
- e. Avoid high-impact aerobic exercise

51. A 52-year-old female with **morbid obesity** is incidentally noted to have mildly **elevated AST** (SGOT) levels. She does not consume alcohol and denies using recreational drugs. A workup for chronic viral hepatitis and hemochromatosis is negative. Which one of the following is most likely **to improve** her hepatic condition?

- a. Pentoxifylline
- b. Simvastatin
- c. L-carnitine
- d. Vitamin E
- e. Weight loss \*

52. A 52-year-old Chinese man with **chronic hepatitis C** presents with abdominal pain and **new ascites**. Ultrasound of the liver reveals enlarged liver, and **portal vein thrombosis**. The most likely diagnosis is:

- a. Acute flare of hepatitis
- b. Hepatocellular carcinoma\*\*\*
- c. Outflow obstruction and congestion
- d. Superinfection with hepatitis A
- e. Superinfection with hepatitis D

53. A 42-year-old male with a history of **intravenous drug use** is tested for hepatitis C. The hepatitis C virus (HCV) **antibody** enzyme **immunoassay** and

**recombinant immune-blot assay** are both reported as **positive**. The quantitative HCV RNA **polymerase chain reaction test** is **negative**. These test results are most consistent with

- a. Current active HCV infection
- b. Chronic HCV infection
- c. False-positive antibody test
- d. Past infection with HCV that is now resolved \*
- e. Very early HCV infection.

- **Renal**

**54.** An **84** old female is brought for a **3-day history of fever** up to **38.7°C**. She is **fussy** and her oral intake is down. She has no rash, no emesis, and no diarrhea. Her urine output is normal. On examination she is alert but fussy. Her rectal temperature is **38.4°C**. The examination is otherwise normal and there are no focal findings of infection. Which one of the following tests is most likely to be helpful in this situation?

- a. A CBC with manual differential
- b. A urinalysis and urine culture \*
- c. A chest radiographs
- d. C-reactive protein
- e. A lumbar puncture

**55.** A **55-year-old** male with **diabetes mellitus** is found to have **asymptomatic microscopic hematuria**. The rest of his urinalysis is negative. He has no other medical problems and quit **smoking 10 years** ago. His only medication is **metformin**. A **urine culture is negative** and his **renal function is normal**. **CT urography is also negative**. Which one of the following should be the next step in the evaluation of his microscopic hematuria?

- a. Urine cytology
- b. Cystoscopy \*
- c. Repeat Urine analysis
- d. Stopping metformin and performing a repeat urinalysis
- e. Antibiotic therapy

**56.** Which one of the following is the most likely cause of **acute kidney injury** in a patient with **eosinophiluria**?

- a. Rhabdomyolysis
- b. Poststreptococcal glomerulonephritis
- c. Acute interstitial nephritis \*
- d. Ethylene glycol poisoning
- e. Tumor lysis syndrome

**57.** A **25-year-old primigravida** at 20 weeks of her pregnancy is found to have **Bacteriuria** on urine test. She is **asymptomatic**. The appropriate next step will

**be:**

- a. Commence with antibiotic treatment \*
- b. Delay treatment until after delivery
- c. Reassurance without treatment.
- d. Repeat urine test at term
- e. Ultrasonography of her kidneys

**58. A 52-year-old female with diabetes mellitus and stage 3 chronic kidney disease. Her estimated glomerular filtration rate of 56 mL/min. Which of the following medications should she avoid to prevent further deterioration in her renal function?**

- a. Lisinopril (Prinivil, Zestril)
- b. Folic acid
- c. Low-dose aspirin
- d. Candesartan (Atacand)
- e. Ibuprofen \*

**59. Which one of the following is a common cause of pre-renal acute kidney injury?**

- a. Acute tubular necrosis
- b. Diuretic overuse \*
- c. Glomerulonephritis
- d. Neurogenic bladder
- e. Prostate hypertrophy

• **Hematology**

**60. A female patient was admitted the previous day with epistaxis. Her blood investigations:**

- Prothrombin time Unaffected
- Partial thromboplastin time Prolonged
- Bleeding time Prolonged
- Platelet count Unaffected

**What is the most likely diagnosis?**

- a. Bernard Soulier syndrome
- b. Factor V deficiency
- c. Glanzmann's thrombasthenia
- d. Von Willbrand disease \*
- e. Warfarin therapy

**61. A 38-year-old gravida 2 para 0 abortus 2 has deep-vein thrombophlebitis in the past 2 years and had spontaneous second-trimester abortions at the ages of 34 and 36. Platelet count is 189,000/mm<sup>3</sup> - Prothrombin time 12.0 sec (N 10.0-12.5) - INR 1.1 - Activated partial thromboplastin time 52 sec (N 35 - 45). There is no family history of bleeding disorders and the evaluation is completely normal. The most likely diagnosis is**

- a. antiphospholipid antibody syndrome \*
- b. chronic liver disease
- c. factor VIII deficiency (hemophilia A)



<p>d. protein C deficiency</p> <p>e. von Willebrand disease</p>
<p>62. A <b>14-year-old</b> girl has <b>fever</b> for the last week. The patient looks <b>pale</b> and <b>unwell</b>. Blood tests reveal a <b>neutropenia</b> with normal red blood counts (RBCs) and platelets. A <b>bone marrow exam reveals no abnormalities</b>. The patient has been otherwise fit and well. There is <b>no organomegaly or lymphadenopathy</b>. The most likely diagnosis is:</p> <p>a. Acute lymphoblastic leukaemia</p> <p>b. Acute myeloid leukaemia</p> <p>c. Aplastic anaemia</p> <p>d. Overwhelming bacterial infection *</p> <p>e. Thrombotic thrombocytopenic purpura</p>
<p>63. A <b>47-year-old</b> teacher complains of <b>difficulty in concentrating</b> at work. She has become increasingly <b>tired and easily fatigued</b>. It becomes more difficult to lift books, rise from her chair. She has also <b>tingling sensation in her fingers</b>. Examination shows a <b>positive Babinski sign</b> and absent reflexes. CBC: Hemoglobin <b>10 g/dL</b> and MCV <b>103 fL (↑)</b>. The most likely diagnosis is:</p> <p>a. Alcohol toxicity</p> <p>b. Folic acid deficiency</p> <p>c. Hypothyroidism</p> <p>d. Liver disease</p> <p>e. Vitamin B12 deficiency *</p>
<p>64. A <b>21-year-old</b> woman is being evaluated for <b>fatigue</b>. Further history reveals <b>weakness, exercise intolerance</b> and a <b>craving for chewing ice</b> that has occurred over the last few weeks. Laboratory analysis reveals a hemoglobin of <b>8.7 g/dL</b>. What is the likely cause of her anemia?</p> <p>a. Lead</p> <p>b. Iron deficiency *</p> <p>c. Chronic disease</p> <p>d. Vitamin B-12 deficiency</p> <p>e. Folic acid deficiency</p>
<p>65. A <b>70-year-old</b> woman has been in long-standing poor health, with <b>severe diabetes mellitus</b> and <b>rheumatoid arthritis</b>. Her physician notes that she appears <b>pale</b> and orders a hematocrit, which shows a result of <b>35%</b>. Examination of the blood smear reveals a <b>microcytic anemia</b>. The physician is considering a differential diagnosis of iron deficiency anemia versus anemia of chronic disease. Which of the following laboratory determinations would be most helpful in distinguishing these conditions?</p> <p>a. Erythrocyte / granulocyte ratio in bone marrow</p> <p>b. Presence or absence of poly-chromatophilic target</p>

<p>cells</p> <ul style="list-style-type: none"> <li>c. Presence or absence of stippled erythrocytes</li> <li>d. Serum ferritin***</li> <li>e. Serum iron</li> </ul>
<p><b>66. A 30-year-old asymptomatic worker visits you for pre-employment assessment. He has a sister who is diagnosed with chronic anemia. This is his blood test results: Hemoglobin 9.5 - White cell count 5,000 - Platelets 160,000 - Serum Ferritin 35 (12-200 µg/L) &amp; Peripheral Blood film: Hypochromic, microcytic, anisocytosis with some target cells. The most appropriate next step is:</b></p> <ul style="list-style-type: none"> <li>a. Hemoglobin electrophoresis***</li> <li>b. Lower GIT endoscopy</li> <li>c. Request for Serum Folate level</li> <li>d. Request for Serum Iron level</li> <li>e. Upper GIT endoscopy</li> </ul>
<p><b>67. A 34-year-old man complains of severe fatigue, that he has to go to bed shortly after arriving home from work. He denies any abdominal pain or change in bowel habits but does describe persistent heartburn. His hemoglobin level is 11.4 g/dL (normal, 14-17 g/dL), mean corpuscular volume is 67 mm<sup>3</sup> (normal, 80-95 mm<sup>3</sup>), and ferritin level is 8.4 µg/L (normal, 15-200 µg/L). Despite treatment with a proton pump inhibitor, his heartburn persists, and he is referred for upper gastrointestinal (GI) endoscopy. This does not reveal any abnormality or a bleeding site. An esophageal biopsy is consistent with "mild esophagitis. An air contrast barium enema reveals a fullness and distention of the right cecum. What should the next step in management be?</b></p> <ul style="list-style-type: none"> <li>a. Perform a flexible sigmoid examination as his upper endoscopy and barium enema examinations should provide adequate visualization of the rest of the GI tract</li> <li>b. Reassure Him That He Is Not Bleeding from His GI Tract Since His Stool Samples Tested Negative for Blood</li> <li>c. Reassure the Patient That He Has Iron Deficiency Anemia and Treat Him with Iron Supplementation</li> <li>d. Refer Him for Colonoscopy with Particular Attention to The Cecum *</li> <li>e. Refer to CT abdomen</li> </ul>
<p><b>68. A 46-year-old male presents to your office with fatigue for the past 2 months. He does not abuse alcohol. He denies any other blood loss. His family history is irrelevant. He admits he does not have a good diet. Vital signs are: BP =135/85, pulse =70 beat/minute. Physical examination is unremarkable except for mild pallor. Stool is negative for occult</b></p>

blood. Laboratory test results are: Hb =9.2 g/dl, Hct =27.6, MCV =117 fl. ECG is normal. The patient is started on folic acid and 4 weeks later presents with a hemoglobin level of 10 g/dL. However, he reports a new “**pins and needles**” sensation in his distal toes and fingers. Which of the following is the underlying cause of the patient’s current symptoms?

- Glucose intolerance.
- Inadequate treatment with folic acid.
- Iron deficiency.
- Peripheral neuropathy from diabetes mellitus.
- Vitamin B12 deficiency. \*

69. A **29-year-old** woman complains of **tiredness**, especially during activity. On examination the patient appears **pale**. The patient is referred for a **bone marrow biopsy** and the extracted cells are sent for cytogenetic analysis. The most likely results are:

- t(14;18)
- t(15;17)
- t(8;21)
- t(8;14)
- t(9;22) \*

70. A woman with **BO** positive blood and her partner with **AB** positive blood have a child together. Which of the following cannot be the child’s blood type?

- AA positive \*
- AB positive
- AO positive
- BB negative
- BB positive

• **Infection**

71. A **40-year-old** man presents with a one-month history of **hemoptysis**. He is a non-smoker. He has also been having **fever** and **night sweats**. Chest x-ray shows **cavity in the right upper zone**. What is the most likely diagnosis?

- Pneumocystis pneumonia
- Post-primary tuberculosis \*
- Primary tuberculosis
- Sarcoidosis
- Small cell carcinoma of the lung

72. A **23-year-old** woman has returned from **India** 1 day ago, presents with **profuse watery diarrhea**. This started suddenly and stool is **profuse and colorless**. She is unable to quantify the number of times she has opened her bowels. On examination her pulse is 110 bpm. Cardiorespiratory and gastrointestinal examination are unremarkable. What is the most likely diagnosis?

- a. Cholera \*
- b. Food poisoning
- c. Pseudo membranous colitis
- d. Salmonellosis
- e. Shigellosis

**73. A 51-year-old man presents with a **lesion on his forearm**. He has spent the past three months travelling around **South America** and returned home 3 days ago. His lesion is present for a few weeks. On examination, there is a **3 × 3 cm erythematous ulcer on the left forearm with a raised edge**. What is the most likely diagnosis?**

- a. African trypanosomiasis
- b. Cryptosporidiosis
- c. Herpes zoster
- d. Leishmaniasis \*
- e. Schistosomiasis

**74. A 74-year-old man presents with **extreme pain in the left knee**. On examination, his temperature is **39°C** and the **knee is swollen and hot**. He is **unable to move the joint** due to pain. The joint is aspirated and the patient is admitted and started on **intravenous antibiotics**. What is the most likely causative organism?**

- a. Haemophilus influenzae
- b. Mycobacterium tuberculosis
- c. Neisseria meningitidis
- d. Neisseriae gonorrhoeae
- e. Staphylococcus aureus \*

**75. A 42-year-old man presents with '**blotches**' over his legs. He has been **HIV positive** for ten years. On examination, there are **multiple purple and brown papules over his legs and his gums**. What is the most likely diagnosis?**

- a. Basal cell carcinoma
- b. Kaposi's sarcoma \*
- c. Malignant melanoma
- d. Squamous cell carcinoma
- e. Toxoplasmosis

**76. An 82-year-old female in a local nursing home has fever, **difficulty in breathing**, and a **cough productive of purulent sputum**. The patient is found to have an oxygen saturation of **86%** on room air and a chest **radiograph shows a new infiltrate**. A decision is made to hospitalize the patient. Which one of the following **intravenous antibiotic** regimens would be most appropriate for this patient?**

- a. Ceftriaxone and azithromycin
- b. Ceftazidime and levofloxacin
- c. Ceftazidime and vancomycin

<p>d. Ceftazidime, levofloxacin, and vancomycin *</p> <p>e. Levofloxacin</p>
<p><b>77. A healthy 24-year-old male presents with a sore throat of 2 days' duration. He reports mild congestion and a dry cough. On examination his temperature is 37.2°C. His pharynx is red without exudates, and there are no anterior cervical nodes. His tympanic membranes are normal, and his chest is clear. Which one of the following would be most appropriate at this point?</b></p> <p>a. A rapid strep test</p> <p>b. A throat culture and empiric treatment with penicillin</p> <p>c. Analgesics and supportive care only *</p> <p>d. Augmentin</p> <p>e. Azithromycin (Zithromax)</p>
<p><b>78. A 25-year-old male presents to your office after recently being diagnosed with HIV infection at the health department. You obtain blood work and note that his CD4+ count is 180 cells/mm<sup>3</sup>. This patient should receive prophylaxis against which one of the following opportunistic infections?</b></p> <p>a. Histoplasma capsulatum</p> <p>b. Microsporidiosis</p> <p>c. Mycobacterium avium-intracellulare complex</p> <p>d. Pneumocystis *</p> <p>e. Toxoplasma gondii</p>
<p><b>79. A 21-year-old male college student presents to the emergency department with a 2-day history of fever, severe muscle and joint pain, nausea, and vomiting. He spent his winter break traveling to red sea and returned 4 days ago. On examination he has a temperature of 39.4°C, gingival bleeding, lower extremity non-pitting edema, right upper quadrant tenderness, a diffuse maculopapular rash, muscle tenderness, and petechiae on his extremities. WBCs 3100/mm<sup>3</sup> (N 4300-10,800), Neutrophils 40% (N 45-75), Lymphocytes 50% (N 16-46) Bands 1% (N 0-5), Hematocrit 50.0% (N 37.0-49.0), Platelets 75,000/mm<sup>3</sup> (N 150,000-350,000), Thick and thin blood smear negative, AST (SGOT) 100 U/L (N 10-40), ALT (SGPT) 120 U/L (N 7-30), Total bilirubin 1.0 mg/dL (N 0.0-1.0), Albumin 3.5 g/dL (N 3.1-4.3) &amp; Creatine phosphokinase 500 U/L (N 60-400). Which one of the following is the most likely diagnosis?</b></p> <p>a. Dengue fever *</p> <p>b. Hepatitis A</p> <p>c. Influenza</p> <p>d. Typhoid fever</p> <p>e. Yellow fever</p>

**80.** A **38-year-old** female presents to the emergency department with an acute onset of fever of **39.4°C**, **chills**, and **rapidly progressive right lower extremity redness**. Shortly after she arrives she complains of **right lower extremity pain and a bright red skin discoloration from her ankle to her right knee**. She is also noted to have a heart rate of **123** beats/min and a WBC count of **22,000/mm<sup>3</sup>**. When selecting an empiric treatment for this patient, which one of the following organisms should you be most concerned about?

- a. *Candida albicans*
- b. *Chlamydia trachomatis*
- c. *Mycoplasma hominis*
- d. Group A *Streptococcus* \*
- e. *Trichophyton rubrum*

**81.** A **4-year-old** female is treated at a local urgent care center with **amoxicillin for acute pharyngitis**. Several days after starting treatment her initial symptoms resolve. When she is 8 days into the 10-day course of her antibiotic treatment she returns to your office because she has developed a **diffuse erythematous maculopapular rash** starting on her torso and extending to her proximal extremities. Which one of the following is the best course of action at this time?

- a. Continue the amoxicillin and begin prednisone and diphenhydramine (Benadryl)
- b. Continue the amoxicillin and change the diagnosis to scarlet fever
- c. Discontinue the amoxicillin and change the diagnosis to infectious mononucleosis
- d. Discontinue the amoxicillin and change the diagnosis to viral exanthem
- e. Discontinue the amoxicillin and note amoxicillin as a potential allergy in her record \*

**82.** A **70-year-old** man has a 2-day history of worsening **generalized headache** and increasing **disturbed conscious**. He now complains of **stiffness in his neck**. On physical examination vital signs were T **38.7 °C**, pulse 85/minute, respiratory rate **23/minute**, and blood pressure 130/85 mmHg. CBC reveals WBC count of **16,850/microliter**. Blood glucose level was 88 mg/dL. Lumbar puncture yields **cloudy cerebrospinal fluid** with glucose of 32 mg/dL, protein 146 mg/dL, and cell count of 3800 WBCs (95% PMNs and 5 % mononuclear) and 122 RBCs. He received antibiotic therapy and improved. Which of the following complications is most likely to occur in this case?

- a. Cerebral infarction

<ul style="list-style-type: none"> <li>b. Cerebellar tonsillar herniation</li> <li>c. Encephalitis</li> <li>d. Hydrocephalus *</li> <li>e. Subdural hematoma</li> </ul>
<p><b>83. A 25-year-old woman, who has recently returned from holiday in Africa, presents to accident and emergency with a 7-day history of fevers, sweats, headache, malaise and lethargy. On examination, her temperature is 39°C. A diagnosis of malaria is suspected. What is the investigation of choice to confirm the diagnosis?</b></p> <ul style="list-style-type: none"> <li>a. Blood cultures</li> <li>b. Full blood count</li> <li>c. Paul-Bunnell test</li> <li>d. Thick and thin blood films *</li> <li>e. Ziehl-Nielson stain</li> </ul>
<p><b>84. A 30-year-old woman aid worker, who has returned from a trip to Haiti 1 day ago, presents to accident and emergency with profuse watery diarrhoea. This started suddenly and she describes her stool as being profuse and colourless. On examination her pulse is 120 bpm. What is the most appropriate treatment?</b></p> <ul style="list-style-type: none"> <li>a. Codeine phosphate</li> <li>b. Oral azithromycin</li> <li>c. Rehydration with intravenous fluids *</li> <li>d. Rehydration with oral rehydration fluids plus metronidazole</li> <li>e. Rehydration with oral rehydration solutions</li> </ul>
<p><b>85. A 35-year-old man presents to his GP with diarrhoea, abdominal pain and nausea. He says he his stools have been pale and he has felt persistently bloated. His symptoms started 6 weeks ago while on a surfing holiday in Peru. What is the most likely diagnosis?</b></p> <ul style="list-style-type: none"> <li>a. Coeliac disease</li> <li>b. Cryptosporidiosis</li> <li>c. Enterotoxigenic E. coli gastroenteritis</li> <li>d. Giardia *</li> <li>e. Salmonella</li> </ul>
<p><b>86. A third year medical student fails to use proper disinfection techniques in carrying out his microbiology experiment. Two weeks later, he has spiking fevers and cramping abdominal pain with diarrhea. On physical examination his temperature is</b></p>



**38.8°C**, pulse 90 bpm, respiratory rate **20/minute**, and blood pressure **100/60** mm Hg. He has a **palpable spleen tip** and **diffuse abdominal pain without masses**. Laboratory studies show a WBC count of **2330/microliter**, Hgb 13.8 g/dL, and platelet count **282,000/microliter**. Which of the following organisms he was most likely using in his experiment?

- a. Aspergillus niger
- b. Entameba histolytica
- c. Shigella flexneri
- d. Clostridium difficile
- e. Salmonella typhi \*

**87. A 19-year-old medical student presents to his GP during fresher's fortnight. He is complaining of neck stiffness, headache and sensitivity to light. On examination, a non-blanching, petechial rash is observed on the trunk. What is the most appropriate immediate management?**

- a. Administer 1.2 g of intramuscular benzylpenicillin \*
- b. Give 200 mg of erythromycin
- c. Send him home with advice to rest and return if the symptoms worsen
- d. Send the patient to accident and emergency immediately
- e. Take a full set of blood tests

**88. A 51-year-old man presents to accident and emergency with a lesion on his forearm. He mentions that he has spent the past three months travelling around South America and only returned home 3 days ago. While his lesion has been present for a few weeks he was reluctant to see a doctor in South America. On examination, there is a 3 × 3 cm erythematous ulcer on the left forearm with a raised edge. What is the most likely diagnosis?**

- a. African trypanosomiasis
- b. Cryptosporidiosis
- c. Herpes zoster
- d. Leishmaniasis \*
- e. Schistosomiasis

**89. A 24-year-old man presents to accident and emergency with fevers, lethargy, myalgia and a cough. He has also developed an itchy rash on his feet. He returned home from a charity trip to Malawi last month and is worried he might have malaria. On**

examination, a **papular rash** is noted around his feet and there is a **palpable liver edge**. Initial blood tests show a **raised white cell count** with an **eosinophilia**. What is the most likely diagnosis?

- a. African trypanosomiasis
- b. Influenza
- c. Leishmaniasis
- d. Malaria
- e. Schistosomiasis \*

90. A 26-year-old **Bangladeshi** man presents to accident and emergency with a 1-week history of **fever, headache, malaise and dry cough**. He returned to the **UK 2 weeks ago**, having spent his summer in Bangladesh. On examination, his temperature is **39°C** and a **patchy maculopapular rash is seen over his trunk**. On examination of the abdomen, there is **splenomegaly**. Blood tests reveal a **low white cell count**. What is the most likely diagnosis?

- a. Cholera
- b. Malaria
- c. Primary syphilis
- d. Tetanus
- e. Typhoid \*

• **Rheumatology**

91. A 43-year old obese patient comes to your office with a **painful, inflamed, swollen base of the thumb**. He reports that the pain begun **suddenly last evening, without a known precipitant or trauma**. Which of the following is the most likely the cause?

- a. Gout \*
- b. Osteoarthritis
- c. Rheumatoid arthritis
- d. Septic arthritis
- e. Stress fracture.

92. A 70-year-old woman has history of **vertebral crush fractures**. Which of the following investigations is **most useful to assess the extent** of her condition?

- a. DEXA scan \*
- b. Full blood count, bone and liver biochemistry blood tests
- c. MRI scan
- d. Spinal x-rays
- e. Vitamin D levels

93. A 45-year-old woman presents to the rheumatology outpatient clinic with a **three-month**

**history of stiff hands and wrists.** She mentions that the pain is particularly **bad first thing in the morning.** On examination, the **wrists, metacarpophalangeal joints and proximal interphalangeal joints** are swollen and warm. Which of the following investigations is **most specific for confirming the diagnosis?**

- a. Anti-citrullinated peptide antibody (anti-CCP) levels \*
- b. C-reactive protein
- c. Erythrocyte sedimentation rate
- d. Rheumatoid factor levels
- e. X-rays

**94. A 55-year-old man presents to his GP with a 2-week history of pain in his hands. The pain is particularly bad in his right hand. On examination, brown discoloration of the nails with onycholysis is noted and the distal interphalangeal joints are tender on palpation.** What is the most likely diagnosis?

- a. Dermatomyositis
- b. Osteoarthritis
- c. Psoriatic arthritis \*
- d. Reactive arthritis
- e. Rheumatoid arthritis

**95. A 20-year-old man presents to accident and emergency with sudden onset pain in the right eye, with associated blurred vision and discomfort when gazing at the lights. He has a history of chronic back pain.** What is the most likely cause of his eye pain?

- a. Acute glaucoma
- b. Anterior uveitis \*
- c. Conjunctivitis
- d. Corneal ulceration
- e. Retinal detachment

**96. A 55-year-old woman presents to her GP with shortness of breath and dry cough. The symptoms began a few months ago and have progressed. She has a past medical history of rheumatoid arthritis, diagnosed ten years earlier. On respiratory examination, there are bi-basal fine inspiratory crackles on auscultation.** What is the most likely cause of her symptoms?

- a. Consolidation
- b. Intrapulmonary nodules
- c. Pleural effusions
- d. Pulmonary fibrosis \*
- e. Pulmonary oedema

**97. A 30-year-old woman presents to accident and emergency with worsening stiffness in the hands, wrists and feet. She mentions that the pain has been particularly bad in the mornings. On examination, there is a palpable spleen. Initial blood tests reveal a**

**low neutrophil count and a raised C-reactive protein.**

**The most likely diagnosis is:**

- a. Felty's syndrome \*
- b. Infectious mononucleosis
- c. Reactive arthritis
- d. Serum sickness
- e. Still's disease

**98. A 67-year-old man presents with long history of pain in his pelvis. He mentions that his head appears larger than before. In addition, he has noticed deterioration in hearing in his left ear. On neurological examination, a left-sided sensorineural deafness is detected. Legs reveals bowing of the tibia. What is the most likely diagnosis?**

- A. Acromegaly
- B. Osteomalacia
- C. Osteoporosis
- D. Paget's disease \*
- E. Ricketts

**99. A 23-year-old woman presents to accident and emergency with a purpuric rash over the buttocks and lower limbs. She has hematuria. She finds it difficult to move due to pain in her ankles and knees. What is the most likely diagnosis?**

- a. Behçet's disease
- b. Ehlers-Danlos syndrome
- c. Henoch-Schönlein purpura \*
- d. Perthes' disease
- e. Still's disease

**100. A 30-year-old man presents with oral ulcers, genital ulcers. On examination, there are apthous ulcers in the mouth, genital ulceration, erythema nodosum over the shins. A skin pathergy test is positive. What is the most likely diagnosis?**

- a. Behçet's disease \*
- b. Berger's disease
- c. Caplan's syndrome
- d. Henoch-Schönlein purpura
- e. Lyme disease

**101. A 27-year-old woman is complaining of sudden onset shortness of breath and right-sided pleuritic chest pain. She has three miscarriages and a deep venous thrombosis in the right leg. Pulse is 110 bpm, respiratory rate is 24 /minute and oxygen saturation is 88 % on room air. What is the diagnostic investigation of choice?**

- a. Chest x-ray
- b. CT pulmonary angiogram \*
- c. D-dimer
- d. ECG

e. Full blood count
<p><b>102. A 32-year-old man is complaining of back pain. It started suddenly after he had lifted a heavy box. The pain has been shooting down his left leg and he cannot walk without the support. He has not passed urine since the onset of pain. The lower limbs, tone and power cannot be assessed due to pain but there are decreased ankle reflexes and a sacral anesthesia. What is the most appropriate next step?</b></p> <ol style="list-style-type: none"> <li>Arrange urgent MRI of spine *</li> <li>Give NSAID analgesia and catheterize the patient</li> <li>Give NSAID analgesia and complete neurological examination</li> <li>Send the patient home with NSAID analgesia and avoid heavy lifting</li> <li>Send the patient home with NSAID analgesia and bed rest advice</li> </ol>
<p>• Geriatric &amp; adult health maintenance</p>
<p><b>103. A disheveled 89-year-old male with dementia who relies on a caregiver for bathing, dressing, shopping, and meal preparation is brought in for continued evaluation of weight loss. No medical cause has been found at this point. On examination a large purplish bruise is noted over his posterior leg and a more faded greenish-yellow bruise is noted over his abdomen, which his caregiver explains by saying that he has fallen several times recently. The patient is also noted to have a large sacral decubitus ulcer. Which one of the following should you suspect as the cause of bruising in this patient?</b></p> <ol style="list-style-type: none"> <li>Senile purpura</li> <li>Thrombocytopenia</li> <li>Leukemia</li> <li>Elder abuse *</li> <li>Cushing syndrome</li> </ol>
<p><b>104. A 55-year-old G2P2 woman for a routine check-up; her last check-up was 3 years ago. She has smoked about half a pack of cigarettes per day for the past 25 years. She has no family history of cancer. Breast examination reveals no masses. Mammography from 3 years ago shows no suspicious masses. A Pap smear from 3 years prior showed no atypical cells. What is the most appropriate next step in management?</b></p> <ol style="list-style-type: none"> <li>Endometrial biopsy</li> <li>Mammography*</li> <li>Measure cancer antigen-125 level</li> <li>Transvaginal ultrasound</li> <li>X-ray of the chest</li> </ol>

**105. A 45 year old healthy man presents to periodic check-up examination clinic. He has no family history of **intestinal polyposis** or **GIT malignancy**. Which one of the following represents an optimal screening strategy for colorectal cancer?**

- a. Colonoscopy every 5 years
- b. Computed tomographic colonography every 10 years
- c. High-sensitivity fecal occult blood test (FOBT) every 2 years
- d. Sigmoidoscopy every 5 years with high-sensitivity FOBT every 3 years \*
- e. Sigmoidoscopy every 5 years

**106. Which one of the following is the greatest risk factor for abdominal aortic aneurysm (AAA)?**

- A. African American race
- B. Cigarette smoking \*
- C. Diabetes mellitus
- D. Female gender
- E. Hypertension

**107. A 60-year-old man presents to your office inquiring about **prostate cancer screening**. Choose the correct statement:**

- a. PSA is the gold standard test for prostate cancer screening.
- b. PSA should be checked annually starting at 50 years of age to screen for prostate cancer.
- c. PSA can produce false-positive results, which is associated with negative psychological effects. \*
- d. Men who have false-positive test are less likely to have additional testing.
- e. The USPSTF recommends PSA testing to screen for prostate cancer at age 60.

**108. A 68-year-old patient is seen for a general examination. Current **recommendations for immunizations** include**

- a. Hepatitis booster every 5 years
- b. Influenza vaccination yearly \*
- c. Meningococcal vaccination
- d. Pneumococcal vaccination yearly
- e. Tetanus booster every 5 years